

### ABSTRACT

A method for processing data in a radiation procedure includes obtaining operation data, and formatting the operation data into a set of image data, wherein the operation data comprises one or a combination of a gantry angle, a patient position, a patient orientation, radiation dose rate, radiation dose fraction, beam pulse rate, beam energy, time when beam was activated, time when beam was deactivated, and beam variation (if any) during an image readout. Also machine axis information, machine status info and operation data from other systems like for instance the RPM system may be included. A method of processing data in a radiation procedure includes obtaining operation data, obtaining an image data, and combining the operation data with the image data in substantially real time.

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